

AMENDMENTS TO THE CLAIMS:

The listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claim 14 (Currently amended): A medical device and delivery system, comprising:

a shape memory alloy element having a restrained shape, a deployed shape and an associated M_d temperature, the shape memory alloy element having been deformed at or above M_d into an at least partially deformed configuration; and

a hollow delivery system holding the at least partially deformed shape memory alloy element in its restrained shape, the shape memory alloy element being in an austenitic state when in the at least partially deformed configuration.

Claim 15 (previously presented): The medical device and delivery system of claim 14, wherein the shape memory alloy includes nickel and titanium.

Claim 16 (previously presented): The medical device and delivery system of claim 14, wherein the medical device includes a stent.

Claim 17 (previously presented): The medical device and delivery system of claim 14, wherein the delivery system includes a catheter.

Claim 18 (previously presented): The medical device and delivery system of claim 14, wherein the shape memory alloy does not generate stress-induced martensite from being at least partially deformed into a restrained shape.

Claim 19 (previously presented): The medical device and delivery system of claim 14, further comprising a restraint configured to receive the shaped memory alloy at a temperature at or above M_d , wherein the shape memory alloy is a tubular member with proximal and distal ends and the restraint is secured around the shape memory alloy in its deformed configuration.

Claim 20 (previously presented): The medical device and delivery system of claim 14, wherein the shape memory alloy is for use within a mammalian body or in close proximity to the mammalian body such that the device is at mammalian body temperature.

Claim 21 (previously presented): The medical device and delivery system of claim 20, wherein the mammalian body temperature is about 35 to 40 degrees C.

Claim 22 (previously presented): The medical device and delivery system of claim 14, wherein the shape memory alloy has an austenite start temperature (A_s), an austenite finish temperature (A_f), and a martensite deformation temperature (M_d).

Claim 23 (previously presented): The medical device and delivery system of claim 22, wherein the shape memory alloy includes the martensite deformation temperature (M_d) of about 50 degrees C or more above the austenite finish temperature (A_f).

Claim 24 (previously presented): The medical device and delivery system of claim 1, wherein the shape memory alloy is in an austenitic state at room temperature of about 22 degrees C.